

A NEW SPECIES OF APHAENOGASTER
(ATTOMYRMA) FROM THE WESTERN UNITED
STATES (HYMENOPTERA: FORMICIDAE)

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RECEIVED FOR PUBLICATION MARCH 27, 1963

ABSTRACT

This widely distributed and common ant of crepuscular habit, *Aphaenogaster* (*Attomyrma*) **megommatus**, n. sp., is described from workers collected one mile north of Camp Foster, Pyramid Lake, Washoe County, Nevada. It has also been collected in Nye and Pershing counties of the same state and also in Malheur county, Oregon; Yuma county, Arizona and Inyo county, California. The species is characterized by its extraordinarily large eyes, "callow like" color and obsolescent epinotal spines. The ant bears a superficial resemblance to *Aph. (A.) boulderensis* M. R. Sm. and could well be mistaken for that western species.

This article describes and figures the worker of a new but common species of *Aphaenogaster* (*Attomyrma*) of our western States. The paper also presents notes on the distribution and biology of this ant. The name *megommatus* refers to the extraordinarily large eyes, one of the outstanding characters of the species. In Creighton (1950, *Ants of North America*, p. 141), this ant keys out to *boulderensis* M. R. Sm. (1941, *Great Basin Nat.* 2 (3): 120), from which it differs in the unusually large eyes, the body color, the more sculptured and stouter body, and other characters.

Aphaenogaster (*Attomyrma*) **megommatus**, n. sp.

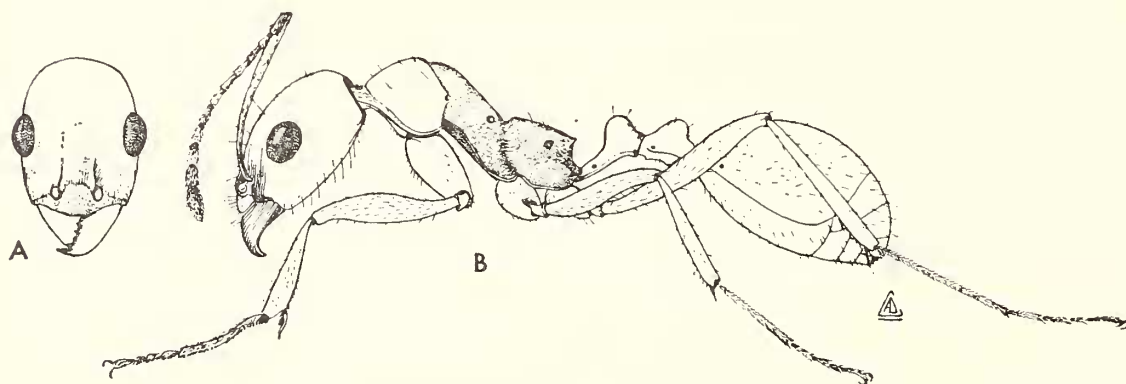


Fig. 1—Worker of *Aphaenogaster* (*Attomyrma*) **megommatus**, n. sp. A, Frontal view of head; B, body in profile. Illustrated by Arthur D. Cushman.

Worker. Length 5.2 mm. Head strikingly slender, excluding mandibles, 1.2 times longer than broad, with weakly convex almost subparallel sides, the posterior portion rounded and narrowed behind the eyes. Eye extraordinarily large and protuberant, 0.35 mm. in its greatest diameter and with 18–20 ommatidia in this linear space. Scape unusually long and slender, gradually broadening toward its apex, the apex exceeding the posterior border of the head by approximately the combined lengths of the first two funicular segments; funiculus slender, with all segments longer than broad, the last 4 or 5 segments perceptibly enlarged but not forming a very distinct club. Middle of the anterior border of the clypeus with a weak but distinct emargination or impression. Thorax in profile with the dorsal surface of the mesothorax sloping obliquely toward the epinotum and forming a depressed or weakly concave outline. Mesoepinotal impression well defined. Base of epinotum subhorizontal, with a medioposterior impression bordered laterally by weak carinae, each ending in a very small tuberclelike spine. Legs rather long and slender, the femora and tibiae not especially enlarged. Anterior surface of petiolar node, in profile, meeting dorsal surface of pedicel at a distinct but weakly defined angle; anterior surface of the petiolar node precipitous, posterior surface of the node oblique. Postpetiole in profile not much larger than petiole; its anterior surface more sloping and its posterior surface less oblique. Gaster from above subelliptical, without basal humeri.

Prothorax, petiole, postpetiole and gaster somewhat smooth and shiny. Mandibles, cheeks, clypeus, mesothorax and epinotum subopaque.

Hairs not abundant or unusually long, present on under side of head as well as on dorsal surface of body. Pilosity of legs generally more abundant than that of body, and also more suberect on tibiae and tarsi.

Color of body under a microscope lamp and at a magnification of 20.7 and 43.2 a sordid light brown or sordid yellow, of a "callowlike" appearance; the large black eyes especially noticeable and forming a strong color contrast with the body.

Type locality. One mile north of Camp Foster, Pyramid Lake, Washoe County, Nevada.

Types. Described from a holotype and 42 paratype workers collected by Ira LaRivers, April 20, 1952, from under a rock in a railroad gravel pit. The holotype and paratype workers have been placed in the U. S. National Museum under U.S.N.M. Type No. 66829.

Other localities. **Nevada:** 10 miles south of Lovelock, Pershing County, May 13, 1951, Ira LaRivers, under a rock associated with *Araeoschizus*; Mereury, Nye County, August 4, 1961, A. C. Cole. **Oregon:** Malheur County, June 14, 1962, R. R. Snelling. **Arizona:** Dateland, Yuma County, 150 ft., October 27, 1952, W. S. Creighton. **California:** 3 miles west of Lone Pine, Inyo County, 4,400 ft., May 3, 1952, W. S. Creighton.

Workers vary in length from 4.4 to 5.2 mm. Paratypes differ from the holotype in their longer and more slender heads; in the epinotal spines ranging in size from almost completely absent to small but perceptible and tuberclelike; in the variable pilosity of some individuals, especially notice-

able on the under side of the head and on the front coxae; and in the variable but weak infuscation of the gaster.

This common ant is widespread and will very probably be found in Utah, Idaho and Mexico. It appears to be largely crepuscular or nocturnal. W. S. Creighton *in litt.* said "—as regards the Dateland, Arizona specimens I can give you a fairly reliable picture of the circumstances under which they were taken even though the field notes for the trip are at the island. In 1952 the highway that runs through Dateland was a dividing line between irrigated land to the south and non irrigated desert to the north. The irrigated area supported, as you would expect, an extensive stand of date palms. The non irrigated area consisted of a sandy area of small dunes about 10–15 ft. high. There were a few bushes and considerable bunch grass but the place was not nearly so sandy as Grey's Well, California, although the sand seemed less prone to shift. We arrived at the station just before dusk and while supper was being prepared, I found the *Aphanogaster* colony which had begun to forage in the dusk and kept it up after dark. There is no doubt that the thing is nocturnal and, what is more, it has its marriage flight at night!—The nest was not at all conspicuous since it consisted of a single nest opening with no crater or mound. I suppose that is because the excavated material is soon displaced by the wind."

R. R. Snelling, who collected the species in Malheur County, Oregon, reported *in litt.* as follows, "These were taken at approximately 10:30 P.M. while foraging. The night was quite cool, 50–52 Fahr., and windy. The sky cloudy, with occasional light showers at the time of the collection. The ants were quite active, and very difficult to capture because of their color and rapid movement. If the color, which blended quite well with the soil, is any indication at all, this species may well be a regular night forager. That the ants were active at such relatively low temperatures would seem to support this view."

THE ANATOMY OF THE ADULT QUEEN AND
WORKERS OF THE ARMY ANTS *ECITON*
BURCHELLI WESTWOOD AND *ECITON*
HAMATUM FABRICUS

ROY M. WHELDEN

[CONTINUED]

THE ANTENNAE

Early in this paper, the presence of a thickened area in the hypodermis in the antennae was noted (Fig. 16, B). In the head, at the base of each antenna, is a small gland composed of about a dozen cells in the queens and of three or four in the workers. The ducts of these cells open through the mem-